

FILE 'CAPLUS' ENTERED AT 13:45:43 ON 05 SEP 2003
L1 4 S DONALD?/IN AND HAHNFELD?/IN
L2 2 S EP1198516/PN ORUS2002061981/PN OR 2003119971/PN OR US20020619
L3 3 S EP1198516/PN OR US2002061981/PN OR 2003119971/PN OR US2002061

FILE 'DPCI' ENTERED AT 13:52:29 ON 05 SEP 2003
L4 2 S EP1198516/PN OR US2002061981/PN OR 2003119971/PN OR US2002061
SEL PN.G

FILE 'CAPLUS' ENTERED AT 13:52:44 ON 05 SEP 2003
L5 2 S E1/PN
L6 0 S US3598886/PN
L7 0 S US3598886/PN

FILE 'DPCI' ENTERED AT 13:54:18 ON 05 SEP 2003
L8 1 S US3598886/PN
SEL PN.G

FILE 'CAPLUS' ENTERED AT 13:54:39 ON 05 SEP 2003
L9 16 S E1-E15/PN

=>

L1 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2003 ACS on STN
AN 2000:900718 CAPLUS

DN 134:57505

TI Blend or dispersion compositions comprising hydrogenated block copolymers
and end-use molding applications

IN **Donald, Robert J.; Hahnfeld, Jerry L.**; Parsons, Gary
D.; Hahn, Stephen F.; Patel, Rajen M.; Esneault, Calvin P.; Phipps, Laura
M.; Pate, James E.; Bhattacharjee, Debkumar

PA Dow Chemical Co., USA

SO PCT Int. Appl., 65 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM C08L053-02

ICS C08F008-04; B32B027-00

CC 37-6 (Plastics Manufacture and Processing)

Section cross-reference(s): 38, 39

FAN.CNT 10

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|--|----------|-----------------|----------|
| PI | WO 2000077094 | A1 | 20001221 | WO 2000-US13898 | 20000519 |
| | W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| | RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | |
| | EP 1198516 | A1 | 20020424 | EP 2000-936127 | 20000519 |
| | R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL | | | |
| | BR 2000012219 | A | 20020507 | BR 2000-12219 | 20000519 |
| | JP 2003502470 | T2 | 20030121 | JP 2001-503941 | 20000519 |
| PRAI | US 1999-139075P | P | 19990611 | | |
| | US 1999-146008P | P | 19990728 | | |
| | US 2000-193313P | P | 20000330 | | |
| | WO 2000-US13898 | W | 20000519 | | |
| AB | Flexible hydrogenated block copolymers can be used in films, profiles, sheets, coatings, injection molded articles, blow or rotational molded articles and pultruded articles. The title blends comprise fully hydrogenated block copolymers of vinyl arom. unit and conjugated diene unit at wt. ratio 60:40, a no.-av. mol. wt. (Mn) 30,000-150,000, a hydrogenated vinyl arom. unit Mn 5000-45,000, a hydrogenated conjugated diene unit Mn 12,000-110,000, and a hydrogenation level >90%. A 90:10 blend of ethylene-propylene copolymer and hydrogenated triblock butadiene-styrene copolymer (90,000, 32% hydrogenated polystyrene and 40% 1,2-butadiene) was molded into a sample part showing deflection temp. under load (264 psi) 50.degree., hardness 58.7, flexural modulus 1030 MPa, Dart impact strength (-40.degree.) 4 J, tensile strength 15 MPa, and elongation 4.6%. | | | | |
| ST | hydrogenated block copolymer blend molded article; film article hydrogenated block copolymer; molding hydrogenated block copolymer blend property | | | | |
| IT | Containers Electric cables Food packaging Gaskets Geomembranes Gloves Hoses Labels Membranes, nonbiological Pipes and Tubes Roofing | | | | |

- Sign materials
- Toys
 - (blend compns. comprising hydrogenated block copolymers for moldings with good balance of phys. properties)
- IT Epoxy resins, uses
- Polyamides, uses
- Polycarbonates, uses
- Polyesters, uses
- Polyethers, uses
- Polyurethanes, uses
- RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
 - (blend compns. comprising hydrogenated block copolymers for moldings with good balance of phys. properties)
- IT Polymer blends
 - RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
 - (blend compns. comprising hydrogenated block copolymers for moldings with good balance of phys. properties)
- IT Medical goods
 - (blood bags; blend compns. comprising hydrogenated block copolymers for moldings with good balance of phys. properties)
- IT Shoes
 - (boots; blend compns. comprising hydrogenated block copolymers for moldings with good balance of phys. properties)
- IT Automobiles
 - (bumpers; blend compns. comprising hydrogenated block copolymers for moldings with good balance of phys. properties)
- IT Paper
 - (coated; blend compns. comprising hydrogenated block copolymers for moldings with good balance of phys. properties)
- IT Polyolefin rubber
 - RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
 - (ethylene-octene; blend compns. comprising hydrogenated block copolymers for moldings with good balance of phys. properties)
- IT Medical goods
 - (films; blend compns. comprising hydrogenated block copolymers for moldings with good balance of phys. properties)
- IT Automobiles
 - (instrument panels; blend compns. comprising hydrogenated block copolymers for moldings with good balance of phys. properties)
- IT Films
 - (medical; blend compns. comprising hydrogenated block copolymers for moldings with good balance of phys. properties)
- IT Construction materials
 - (siding; blend compns. comprising hydrogenated block copolymers for moldings with good balance of phys. properties)
- IT Drug delivery systems
 - (transdermal, controlled-release; blend compns. comprising hydrogenated block copolymers for moldings with good balance of phys. properties)
- IT Medical goods
 - (tubes; blend compns. comprising hydrogenated block copolymers for moldings with good balance of phys. properties)
- IT Seals (parts)
 - (weatherstrips; blend compns. comprising hydrogenated block copolymers for moldings with good balance of phys. properties)
- IT 9002-85-1, Polyvinylidene chloride 9002-86-2, Polyvinyl chloride
 9002-88-4D, Polyethylene, chlorinated 9003-53-6D, Polystyrene,
 hydrogenated 9003-54-7 9003-56-9, Acrylonitrile-butadiene-styrene
 copolymer 9010-77-9, Ethylene acrylic acid copolymer 25038-59-9,
 Polyethylene terephthalate, uses 25067-34-9, Ethylene vinyl alcohol
 copolymer 25068-12-6, Ethylene styrene copolymer
 RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
 - (blend compns. comprising hydrogenated block copolymers for moldings with good balance of phys. properties)

IT 9002-88-4, Polyethylene 9010-79-1, Ethylene-propylene copolymer
26007-43-2, Topas 5013 26221-73-8, Ethylene-1-octene copolymer
RL: PRP (Properties); TEM (Technical or engineered material use); USES
(Uses)
(blend compns. comprising hydrogenated block copolymers for moldings
with good balance of phys. properties)

IT 106107-54-4D, Butadiene-styrene block copolymer, hydrogenated
RL: PRP (Properties); TEM (Technical or engineered material use); USES
(Uses)
(triblock; blend compns. comprising hydrogenated block copolymers for
moldings with good balance of phys. properties)

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE

- (1) Dow Chemical Co; WO 9415997 A 1994 CAPLUS
- (2) Dow Chemical Co; WO 9634896 A 1996 CAPLUS
- (3) Edmonson, M; WO 9816582 A 1998 CAPLUS
- (4) Exxon Chemical Patents Inc; WO 9421694 A 1994 CAPLUS
- (5) Mitsubishi Chem Ind; EP 0505110 A 1992 CAPLUS
- (6) Nippon Zeon Co; DE 3227650 A 1983 CAPLUS
- (7) Walther, B; US 5905097 A 1999 CAPLUS

=>